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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,019	07/28/2003	R. William Ezell	073671.0171	7635
5073	7590	08/26/2005	EXAMINER	
BAKER BOTTS L.L.P. 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980			NGUYEN, KHAI M	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/629,019

Applicant(s)

EZELL, R. WILLIAM

Examiner

Khai M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/28/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-32 is/are allowed.
- 6) ☒ Claim(s) 1-3, 13-16, 26, and 33 is/are rejected.
- 7) ☒ Claim(s) 4-12 and 17-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/28/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/03 8/03 2/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. Initiated copies of the information disclosure statements submitted on 07/28/2003, 08/12/2003, and 02/14/2005 are attached herewith.

### ***Specification***

2. The application has not been checked to the extent necessary to determine the presence of all possible typographical and grammatical errors. However, Applicant's cooperation is requested in correcting any errors of which he/she may become aware in the application.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, the term or phrase "repeating the steps" lacks antecedent basis and/or unclear. Correction/clarification is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 13-16, 26, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Muza (US 6,304,135 B1) (hereinafter referred to as Muza).

Regarding claim 1. Muza discloses a method (associated with Figs. 5-7) for storing a result of a tuning (the title) process, comprising:

generating a first characteristic signal (the reference signal  $V_{ref}$ );

generating a second characteristic signal (the signal  $V_x$ ) in response (at least in part) to a current signal (provided from the current source block 52 – col. 4, lines 43-50);

determining an adjustment to the current signal (by the digital control logic block 72 – controlling the switches SWA...) based at least in part upon the first and second characteristic signals ( $V_{ref}/V_x$ ); and

storing a digital value representing the adjustment (Fig. 7 shows the digital signal outputted from the comparator of Fig. 5 and/or Fig. 7 is provided to or stored onto the digital elements 72/74).

Regarding claim 2, Muza discloses the method of claim 1 including: repeating the steps iteratively (the tuning/calibration process of Fig. 6 which controlled by the digital control block 72); and updating the digital value after each iteration (Figs. 5-7 and col. 5, lines 29-44).

Regarding claim 3, Muza discloses the method of claim 2, wherein the digital value comprises a plurality of bits (digital "0" and/or "1" outputted from the comparators of Figs. 5 & 7); and the method further comprises storing (onto 72/74 of Fig. 7) the result of each iteration in a bit of the digital value (Figs. 6-7).

Regarding claim 13, Muza discloses comprising tuning a filter (see abstract) using the stored digital value (in the digital block 72 of Fig. 7 for controlling the switches).

Regarding claim 14, Muza discloses a tuning circuit (Fig. 5), comprising:  
a signal generator (the reference supplier) operable to generate/provide a first characteristic signal ( $V_{ref}$ );

a master circuit (50 of Fig. 5) operable to receive a current signal (from the controllable current source 52 – column 4, lines 43-50) and to generate/provide a second characteristic signal ( $V_x$ ) in response to the current signal (from 52);

a controller (72 of Fig. 7 – column 5, lines 19-44) operable to determine an adjustment (by turning on/off the switches) to the current signal based at least in part upon the first and second characteristic signals; and

a memory (72/74 of Fig. 7) operable to store a digital value representing the adjustment.

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Regarding claim 15, Muza discloses the controller of claim 14 is operable to repeat the steps iteratively (the tuning/calibration process of Fig. 6 which controlled by the digital control block 72); and update the digital value after each iteration (Figs. 5-7 and col. 5, lines 29-44).

Regarding claim 16, Muza discloses the circuit of claim 15, wherein: the digital value comprises a plurality of bits (digital "0" and/or "1" outputted from the comparators of Figs. 5 & 7); and the controller (72/74 of Fig. 7) is operable to store the result (the calibrated result) of each iteration in a bit of the digital value (on to the 72/74).

Regarding claim 26, Muza discloses a filter (abstract) that is tuned using the stored digital value (from the block 72 of Fig. 7).

Regarding claim 33, Muza discloses a system (Figs. 5-7), comprising:

- means (the reference supplier) for generating a first characteristic signal ( $V_{ref}$ );
- means (50/52) for generating a second characteristic signal ( $V_x$ ) in response to a current signal (line 43 of column 4 to line 44 of column 5) ;
- means (72) for determining (by turning on/off the switches) an adjustment to the current signal based at least in part upon the first and second characteristic signals; and
- means (72/74) for storing a digital value (output from the comparators of Figs. 5 & 7) representing the adjustment.

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***Allowable Subject Matter***

5. Claims 4-12, and 17-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 27-32 are allowed. The primary reason for allowance of these claims is the inclusion of, among other things, the counter and controller as recited.

***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571-272-1809. The examiner can normally be reached on 9:00 - 5:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert (Bob) J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 24, 2005

Khai M. Nguyen  
Art Unit: 2819  
571-272-1809

